6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2022-0265; FRL-9781-01-R4]

Air Plan Approval; North Carolina; Charlotte-Gastonia-Rock Hill Area Limited Maintenance Plan for the 1997 8-Hour Ozone NAAQS

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a state implementation plan (SIP) revision submitted by the State of North Carolina, through the North Carolina Division of Air Quality (NCDAQ), via a letter dated December 9, 2021. The SIP revision includes the 1997 8-hour ozone national ambient air quality standards (NAAQS) Limited Maintenance Plan (LMP) for the North Carolina portion (hereinafter referred to as the Metrolina Area) of the Charlotte-Gastonia-Rock Hill NC-SC 1997 8-hour ozone maintenance area (hereinafter referred to as the "Charlotte NC-SC 1997 8-hour NAAQS Area"). The Charlotte NC-SC 1997 8-hour NAAQS Area is comprised of Cabarrus, Gaston, Lincoln, Mecklenburg, Rowan, and Union Counties and a portion of Iredell County (i.e., Coddle Creek and Davidson Townships) in North Carolina; and the Rock Hill Metropolitan Planning Organization boundary in York County, South Carolina. EPA is proposing to approve the Metrolina Area LMP because it provides for the maintenance of the 1997 8-hour ozone NAAQS within the Metrolina Area through the end of the second 10-year portion of the maintenance period in 2034. The effect of this action would be to make certain commitments related to maintenance of the 1997 8-hour ozone NAAQS in the Metrolina Area federally enforceable as part of the North Carolina SIP.

DATES: Comments must be received on or before **[Insert date 30 days after date of publication in the FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2022-0265 at http://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Jane Spann, Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. The telephone number is (404) 562-9029. Ms. Spann can also be reached via electronic mail at spann.jane@epa.gov.

SUPPLEMENTARY INFORMATION:

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I. Summary of EPA's Proposed Action

In accordance with the Clean Air Act (CAA or Act), EPA is proposing to approve the Metrolina Area LMP for the 1997 8-hour ozone NAAQS that was submitted by NCDAQ as a revision to the North Carolina SIP on December 9, 2021. In 2004, the Charlotte NC-SC 1997 8-hour NAAQS Area, which includes the Metrolina Area, was designated as nonattainment for the 1997 8-hour ozone NAAQS. Subsequently, in 2013, after a clean data determination and EPA's approval of a maintenance plan, the Metrolina Area was redesignated to attainment for the 1997 8-hour ozone NAAQS. *See* 76 FR 70656 (November 15, 2011) *and* 78 FR 72036 (December 2, 2013

The Metrolina Area LMP is designed to maintain the 1997 8-hour ozone NAAQS within the Metrolina Area through the end of the second 10-year portion of the maintenance period beyond redesignation. EPA is proposing to approve the plan because it meets all applicable requirements under CAA sections 110 and 175A.

As a general matter, the Metrolina Area LMP relies on the same control measures and contingency provisions to maintain the 1997 8-hour ozone NAAQS during the second 10-year portion of the maintenance period as the maintenance plan submitted by NCDAQ for the first 10-year period.

II. Background

Ground-level ozone is formed when oxides of nitrogen (NO_X) and volatile organic compounds (VOC) react in the presence of sunlight. These two pollutants, referred to as ozone precursors, are emitted by many types of pollution sources, including on- and off-road motor vehicles and engines, power plants and industrial facilities, and smaller area sources such as lawn and garden equipment and paints. Scientific evidence indicates that adverse public health effects occur following exposure to ozone, particularly in children and in adults with lung disease. Breathing air containing ozone can reduce lung function and inflame airways, which can increase respiratory symptoms and aggravate asthma and other lung diseases.

Ozone exposure also has been associated with increased susceptibility to respiratory infections, medication use, doctor visits, and emergency department visits and hospital admissions for individuals with lung disease. Children are at increased risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors, which increases their exposure.[1]

In 1979, under section 109 of the CAA, EPA established primary and secondary NAAQS for ozone at 0.12 parts per million (ppm), or 120 parts per billion (ppb), averaged over a 1-hour period. *See* 44 FR 8202 (February 8, 1979). On July 18, 1997, EPA revised the primary and secondary NAAQS for ozone to set the acceptable level of ozone in the ambient air at 0.08 ppm, averaged over an 8-hour period. *See* 62 FR 38856 (July 18, 1997).[2] EPA set the 8-hour ozone NAAQS based on scientific evidence demonstrating that ozone causes adverse health effects at lower concentrations and over longer periods of time than was understood when the pre-existing 1-hour ozone NAAQS was set. EPA determined that the 8-hour NAAQS would be more protective of human health, especially for children and adults who are active outdoors, and individuals with a pre-existing respiratory disease, such as asthma.

Following promulgation of a new or revised NAAQS, EPA is required by the CAA to designate areas throughout the nation as attaining or not attaining the NAAQS. On April 15, 2004, EPA designated the Charlotte NC-SC 1997 8-hour NAAQS Area, which consists of Cabarrus, Gaston, Lincoln, Mecklenburg, Rowan and Union Counties and a portion of Iredell County (i.e., Coddle Creek and Davidson Townships) in North Carolina; and the Rock Hill Metropolitan Planning Organization boundary in York County, South Carolina, as nonattainment

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[1] *See* "Fact Sheet, Proposal to Revise the National Ambient Air Quality Standards for Ozone," January 6, 2010, *available at* https://www.epa.gov/sites/default/files/2020-12/documents/decision_to_retain_ozone_standards_fact_sheet_final2.pdf, *and* 27 FR 2938 (January 19, 2010).

[2] In March 2008, EPA completed another review of the primary and secondary ozone NAAQS and tightened them further by lowering the level for both to 0.075 ppm. *See* 73 FR 16436 (March 27, 2008). Additionally, in October 2015, EPA completed a review of the primary and secondary ozone NAAQS and tightened them by lowering the level for both to 0.070 ppm. *See* 80 FR 65292 (October 26, 2015).

for the 1997 8-hour ozone NAAQS. The designation became effective on June 15, 2004. *See* 69 FR 23858 (April 30, 2004).

Similarly, on May 21, 2012, EPA designated areas as unclassifiable/attainment or nonattainment for the 2008 8-hour ozone NAAQS. The Charlotte-Gastonia-Rock Hill NC-SC Area[3] (hereinafter referred to as the Charlotte NC-SC 2008 NAAQS Area) was designated as nonattainment for the 2008 8-hour ozone NAAQS and classified as a marginal nonattainment area. This designation became effective on July 20, 2012. *See* 77 FR 30088.

In addition, on November 16, 2017, areas were designated for the 2015 8-hour ozone NAAQS. The entire states of North Carolina and South Carolina were designated attainment/unclassifiable for the 2015 8-hour ozone NAAQS, with an effective date of January 16, 2018. *See* 82 FR 54232.

A state may submit a request that EPA redesignate a nonattainment area that is attaining a NAAQS to attainment, and, if the area has met other required criteria described in section 107(d)(3)(E) of the CAA, EPA may approve the redesignation request.[4] One of the criteria for redesignation is to have an approved maintenance plan under CAA section 175A. The maintenance plan must demonstrate that the area will continue to maintain the NAAQS for the period extending ten years after redesignation, and it must contain such additional measures as necessary to ensure maintenance and such contingency provisions as necessary to assure that violations of the NAAQS will be promptly corrected. Eight years after the effective date of redesignation, the state must also submit a second maintenance plan to ensure ongoing maintenance of the NAAQS for an additional ten years pursuant to CAA section 175A(b) (i.e., ensuring maintenance for 20 years after redesignation).

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[3] The Charlotte – Gastonia-Rock Hill NC-SC Area for the 2008 8-hour ozone NAAQS consists of portions of Cabarrus, Gaston, Iredell, Lincoln, Rowan and Union Counties and the entirety of Mecklenburg County in North Carolina, and a portion of York County, South Carolina, which excludes the Catawba Area.

[4] Section 107(d)(3)(E) of the CAA sets out the requirements for redesignating a nonattainment area to attainment. They include attainment of the NAAQS, full approval of the applicable SIP pursuant to CAA section 110(k), determination that improvement in air quality is a result of permanent and enforceable reductions in emissions, demonstration that the state has met all applicable section 110 and part D requirements, and a fully approved maintenance plan under CAA section 175A.

EPA has published long-standing guidance for states on developing maintenance plans, beginning with a 1992 memo referred to as the Calcagni memo.[5] The Calcagni memo provides that states may generally demonstrate maintenance in one of two ways: by either performing air quality modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS, or by showing that projected future emissions of a pollutant and its precursors will not exceed the level of emissions generated during a year when the area was attaining the NAAQS (i.e., attainment year inventory). *See* Calcagni memo at page 9. EPA clarified in three subsequent guidance memos that certain areas can meet the CAA section 175A requirement to provide for maintenance by showing that the area is unlikely to violate the NAAQS in the future, using information such as the area's design value[6] being well below the standard and the area having a historically stable design value.[7] EPA refers to a maintenance plan containing this streamlined demonstration as an LMP.

EPA has interpreted CAA section 175A as permitting the LMP option because section 175A of the Act does not define how areas may demonstrate maintenance, and in EPA's experience implementing the various NAAQS, areas that qualify for LMPs and have approved LMPs have rarely, if ever, experienced subsequent violations of the NAAQS. As noted in the LMP guidance memoranda, states seeking an LMP must still submit the other maintenance plan elements outlined in the Calcagni memo, including: an attainment emissions inventory, provisions for the continued operation of the ambient air quality monitoring network, verification of continued attainment, and a contingency plan in the event of a future violation of the NAAQS.

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[5] John Calcagni, Director, Air Quality Management Division, EPA Office of Air Quality Planning and Standards (OAQPS), "Procedures for Processing Requests to Redesignate Areas to Attainment," September 4, 1992 (Calcagni memo, *available at* https://www.epa.gov/ground-level-ozone-pollution/procedures-processing-requests-redesignate-areas-attainment).

[6] The ozone design value for a monitoring site is the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentrations. The design value for an ozone area is the highest design value of any monitoring site in the area.

[7] *See* "Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas" from Sally L. Shaver, OAQPS, dated November 16, 1994; "Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas" from Joseph Paisie, OAQPS, dated October 6, 1995; and "Limited Maintenance Plan Option for Moderate PM_{10} Nonattainment Areas" from Lydia Wegman, OAQPS, dated August 9, 2001. Copies of these guidance memoranda can be found in the docket for this proposed rulemaking.

Moreover, a state seeking an LMP must still submit its section 175A maintenance plan as a revision to its SIP, with all attendant notice and comment procedures. While the LMP guidance memoranda were originally written with respect to certain NAAQS,[8] EPA has extended the LMP interpretation of section 175A to other NAAQS and pollutants not specifically covered by the previous guidance memos.[9]

In this case, EPA is proposing to approve the Metrolina Area LMP because the State has made a showing, consistent with EPA's prior LMP guidance, that the Charlotte NC-SC 1997 8-hour NAAQS Area's ozone concentrations are well below the 1997 8-hour ozone NAAQS and have been historically stable, and that it has met the other maintenance plan requirements. NCDAQ submitted this LMP for the Metrolina Area to fulfill the second maintenance plan requirement in the Act. EPA's evaluation of the Metrolina Area LMP is presented below.

In November of 2011 and in March of 2013, NCDAQ submitted to EPA a request to redesignate the Metrolina Area of the Charlotte NC–SC 1997 8-hour NAAQS Area to attainment for the 1997 8-hour ozone NAAQS. This submittal included a plan to provide for maintenance of the 1997 8-hour ozone NAAQS in the Metrolina Area through 2024 as a revision to the North Carolina SIP. EPA approved North Carolina's Metrolina Area maintenance plan and the State's request to redesignate the North Carolina portion of the Charlotte NC–SC 1997 NAAQS Area to attainment for the 1997 8-hour ozone NAAQS effective January 2, 2014.[10]

Under CAA section 175A(b), states must submit a revision to the first maintenance plan eight years after redesignation to provide for maintenance of the NAAQS for ten additional years following the end of the first 10-year period. EPA's final implementation rule for the 2008 8-hour ozone NAAQS revoked the 1997 8-hour ozone NAAQS and stated that one consequence of revocation was that areas that had been redesignated to attainment (i.e., maintenance areas) for

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[8] The prior memos addressed: unclassifiable areas under the 1-hour ozone NAAQS, nonattainment areas for the PM_{10} (particulate matter with an aerodynamic diameter less than 10 microns) NAAQS, and nonattainment areas for the carbon monoxide (CO) NAAQS.

[9] *See, e.g.*, 79 FR 41900 (July 18, 2014) (Approval of the second ten-year LMP for the Grant County 1971 SO_2 maintenance area).

[10] *See* 78 FR 72036 (December 2, 2013).

the 1997 NAAQS no longer needed to submit second 10-year maintenance plans under CAA section 175A(b). *See* 80 FR 12264, 12315 (March 6, 2015).

In *South Coast Air Quality Management District v. EPA*, the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) vacated the EPA's interpretation that, because of the revocation of the 1997 8-hour ozone NAAQS, second maintenance plans were not required for "orphan maintenance areas," i.e., areas that had been redesignated to attainment for the 1997 8-hour ozone NAAQS and were designated attainment for the 2008 ozone NAAQS. *South Coast*, 882 F.3d 1138 (D.C. Cir. 2018). Thus, states with these "orphan maintenance areas" under the 1997 8-hour ozone NAAQS must submit maintenance plans for the second maintenance period. Accordingly, on December 9, 2021, North Carolina submitted a second 10-year maintenance plan covering the Metrolina Area that provides for attainment of the 1997 8-hour ozone NAAQS through 2034.

In recognition of the continuing record of air quality monitoring data showing ambient 8-hour ozone concentrations in the Charlotte NC-SC 1997 8-hour NAAQS Area well below the 1997 8-hour ozone NAAQS, NCDAQ chose the LMP option for the development of its second 1997 8-hour ozone NAAQS maintenance plan covering the Metrolina Area.

III. North Carolina's SIP Submittal

As mentioned above, on December 9, 2021, NCDAQ submitted the Metrolina Area LMP as a revision to the North Carolina SIP. The submittal includes the LMP, air quality data, emissions inventory information, and appendices. Appendices to the plan include average 2017 summer day anthropogenic emissions by county and sector and documentation of notice, hearing, and public participation prior to adoption of the plan by NCDAQ on December 9, 2021. The Metrolina Area LMP does not include any additional emission reduction measures but relies on the same emission reduction strategy as the first 10-year maintenance plan that provides for the maintenance of the 1997 8-hour ozone NAAQS through 2024. Specifically, the measures upon which the second 10-year LMP for the Metrolina Area relies include the foundation control

program, which consists of federal and state control measures that ensure continued maintenance of the NAAQS, as well as supporting programs such as the Air Awareness Program, Advance Program, Grant Program, Volkswagen Settlement, and EPA Consent Decree with Duke Energy Corporation. It also relies on continued implementation of federal measures (e.g., Tier 2 and 3 Motor Vehicle Emission and Fuel Standards,[11] Utility New Source Performance Standards (NSPS),[12] NOx SIP Call,[13] and interstate transport rules such as the Cross-State Air Pollution Rule (CSAPR)[14] and CSAPR Update).[15]

IV. EPA's Evaluation of North Carolina's SIP Submittal

EPA has reviewed the Metrolina Area's LMP, which is designed to maintain the 1997 8-hour ozone NAAQS within the Metrolina Area through the end of the 20-year period beyond redesignation, as required under CAA Section 175A(b). The following is a summary of EPA's interpretation of the section 175A requirements[16] and EPA's evaluation of how each requirement is met.

A. Attainment Emissions Inventory

For maintenance plans, a state should develop a comprehensive, accurate inventory of actual emissions for an attainment year to identify the level of emissions which is sufficient to maintain the NAAQS. A state should develop this inventory consistent with EPA's most recent guidance on emissions inventory development. For ozone, the inventory should be based on typical summer day emissions of VOCs and NOx, as these pollutants are precursors to ozone formation. The Metrolina LMP includes an ozone attainment emissions inventory for the Metrolina Area that reflects typical summer day emissions in 2017. Table 1 presents a summary of the inventory for 2017 contained in this LMP.

Table 1 – Average Summer Day 2017 Anthropogenic NOx and VOC Emissions by Sector

[11] *See* 79 FR 23414 (April 28, 2014).
[12] *See* 77 FR 9304 (February 16, 2012).
[13] *See* 63 FR 57355 (October 27, 1998).
[14] *See* 76 FR 48208 (August 8, 2011).
[15] *See* 81 FR 74504 (October 26, 2016).
[16] *See* Calcagni memo at pages 7-13.

for the Metrolina Area (tons/summer day)

Sector	NOx	VOC
Fire	0.028	0.269
Nonpoint	0.267	2.266
Nonroad	0.436	0.451
Onroad	2.184	1.376
Point	0.072	0.912
Total	2.987	5.274

The Attainment Emissions Inventory section of the Metrolina Area's LMP describes the methods, models, and assumptions used to develop the attainment inventory. As described in the Emissions Inventory section (Section 3.1) of the LMP, NCDAQ generally relied on the 2017 National Emissions Inventory (NEI).[17] The Metrolina Area's maintenance inventory is comprised of anthropogenic sources. Naturally occurring, or biogenic, emissions are not included in the inventory, as these emissions are outside the State's purview. Because much of the EPA's 2017 NEI is compiled at the county level, but the Metrolina Area includes only a subset of the townships in relevant counties, the NCDAQ developed methodologies to estimate the proportion of county emissions occurring in the maintenance area. When available, these methodologies utilize locational information; otherwise, they assume population as a surrogate indicator of emissions activity.

Based on our review of the methods, models, and assumptions used by NCDAQ to develop the inventory, as well as our review of the 2017 summer emissions data, EPA proposes to find that the Metrolina Area's LMP includes a comprehensive, reasonably accurate inventory of actual ozone precursor emissions in attainment year 2017 and proposes to conclude that this

[17] U.S. EPA, 2017 Emissions Modeling Data downloaded from ftp://newftp.epa.gov/air/emismod/2017/reports, accessed August 2021.

is acceptable for the purposes of a subsequent maintenance plan under CAA section 175A(b).

B. Maintenance Demonstration

The maintenance demonstration requirement is considered satisfied in an LMP if the state can provide sufficient weight of evidence indicating that air quality in the area is well below the level of the NAAQS, that past air quality trends have been shown to be stable, and that the probability of the area experiencing a violation over the second 10-year maintenance period is low.[18] These criteria are evaluated below with regard to the Charlotte NC-SC 1997 8-hour NAAQS Area as a whole.

1. Evaluation of ozone concentration levels

To attain the 1997 8-hour ozone NAAQS, the three-year average of the fourth-highest daily maximum 8-hour average ozone concentrations (i.e., the design value) at each monitor within an area must not exceed 0.08 ppm. Based on the rounding convention described in 40 CFR part 50, Appendix I, the NAAQS is attained if the design value is 0.084 ppm or below. At the time of submission, EPA evaluated quality assured and certified 2018-2020 monitoring data[19] and determined that the design value for the Charlotte NC-SC 1997 8-hour NAAQS Area was 0.067 ppm, or 80 percent of the level of the 1997 8-hour ozone NAAQS (measured at the Garinger High School Monitor (AQS ID: 37-119-0041) and the University Meadows monitor (AQS ID: 37-119-0046) in Mecklenburg County, NC). Consistent with prior guidance, EPA believes that if the most recent air quality design value for the area is at a level that is well below the NAAQS (e.g., below 85 percent of the NAAQS, or in this case below 0.071 ppm), then EPA considers the state to have met the section 175A requirement for a demonstration that the area will maintain the NAAQS for the requisite period. Such a demonstration assumes continued applicability of prevention of significant deterioration requirements and any control measures already in the SIP and that Federal measures will remain in place through the end of the second

[18] *See* Footnote 7.
[19] *See* https://www.epa.gov/air-trends/air-quality-design-values#report (follow the "Ozone Design Values 2020 (xlsx)" hyperlink, then open "Table4. County Status" in the spreadsheet and scroll down to North Carolina).

10-year maintenance period, absent a showing consistent with section 110(l) that such measures are not necessary to assure maintenance.

Tables 2a and 2b present the 2003-2021 design values for each monitor in the Charlotte NC-SC 1997 8-hour NAAQS Area. As shown in these tables, all sites have been below the level of the 1997 8-hour ozone NAAQS since the area was redesignated to attainment, and the most recent design value is below the level of 85 percent of the NAAQS, consistent with prior LMP guidance. The 2019-2021 design value is 0.066 ppm or 79 percent of the level of the 1997 8-hour ozone NAAQS (measured at the Garinger High School Monitor (AQS ID: 37-119-0041) and the University Meadows monitor (AQS ID: 37-119-0046) in Mecklenburg County, NC).

Table 2a— 1997 8-Hour Ozone NAAQS 2003-2011 Design Values (ppm) at Monitoring Sites in the Charlotte NC-SC 1997 NAAQS Area

AQS Site ID	Site Name	County Name	2001-2003 DV	2002-2004 DV	2003-2005 DV	2004-2006 DV	2005-2007 DV	2006-2008 DV	2007-2009 DV	2008-2010 DV	2009-2011 DV
37-109-0004	Crouse	Lincoln	0.092	0.086	0.081	0.079	0.083	0.082	0.076	0.072	0.071
37-119-0041	Garinger	Mecklenburg	0.096	0.091	0.086	0.088	0.090	0.089	0.082	0.078	0.079
37-119-0046	University Meadows	Mecklenburg									
37-119-1005	Arrowood	Mecklenburg	0.084	0.081	0.078	0.080	0.083	0.079	0.076	0.073	0.076
37-119-1009	County Line	Cabarrus	0.098	0.092	0.087	0.088	0.093	0.094	0.086	0.082	0.078
37-159-0021	Rockwell CSS	Rowan	0.100	0.094	0.088	0.083	0.089	0.088	0.083	0.077	0.075
37-159-0022	Enochville	Rowan	0.099	0.091	0.085	0.085	0.090	0.088	0.083	0.077	0.076
37-179-0003	Monroe	Union	0.088	0.085	0.079	0.078	0.081	[e]	0.076	0.072	0.070
45-091-8801	Catawba Longhouse	Catawba Indian Nation									

Table 2b— 1997 8-Hour Ozone NAAQS 2012-2021 Design Values (ppm) at Monitoring Sites in the Charlotte NC-SC 1997 NAAQS Area

AQS Site ID	Site Name	County Name	2010-2012 DV	2011-2013 DV	2012-2014 DV	2013-2015 DV	2014-2016 DV	2015-2017 DV	2016-2018 DV	2017-2019 DV	2018-2020 DV	2019-2021 DV
37-109-0004	Crouse	Lincoln (NC)	0.075	0.072	0.068	0.065	0.067	0.067	0.065	0.064	0.060	0.061
37-119-0041	Garinger	Mecklenburg (NC)	0.083	0.078	0.070	0.068	0.069	0.069	0.068	0.070	0.067	0.066
37-119-0046	University Meadows	Mecklenburg (NC)					0.070[a]	0.070[a]	0.070	0.069	0.067	0.066
37-119-1005	Arrowood	Mecklenburg (NC)	0.077	0.072	0.066[b]							
37-119-1009	County Line	Cabarrus (NC)	0.083	0.078	0.073	0.067[c]						
37-159-0021	Rockwell CSS	Rowan (NC)	0.078	0.073	0.068	0.064	0.065	0.064	0.062	0.062	0.061	0.062
37-159-0022	Enochville	Rowan (NC)	0.077	0.072[d]								
37-179-0003	Monroe	Union (NC)	0.073	0.070	0.068	0.067			[e]	[e]	0.063	0.062
45-091-8801	Catawba Longhouse	Catawba Indian Nation							0.063	0.064	0.062	0.062

[a] Monitor started in 2016 to replace 37-119-1009; EPA approved combining data for the two sites to calculate a design value; value reported is a combined design value.
[b] Monitor was shut down at the end of the 2014 ozone season.
[c] Monitor was shut down at the end of the 2015 ozone season and replaced by 37-119-0046 in 2016. EPA approved combining data from the two monitors to calculate design values.
[d] Monitor was shut down at the end of the 2013 ozone season.
[e] Monitor did not meet the 3-year completeness requirement of 90 percent.

Therefore, the Metrolina Area is eligible for the LMP option, and EPA proposes to find that the long record of monitored ozone concentrations that attain the NAAQS, together with the continuation of existing VOC and NOx emissions control programs, adequately provide for the maintenance of the 1997 8-hour ozone NAAQS in the Metrolina Area through the second 10-year maintenance period and beyond.

Additional supporting information that the Metrolina Area is expected to continue to maintain the NAAQS can be found in projections of future year design values that EPA recently completed for the Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS

that EPA finalized on April 30, 2021.[20] Those projections, made for the year 2023, show that the maximum design value for the Charlotte NC-SC 1997 Ozone Area is expected to be 60.3 parts per billion (ppb). EPA is not proposing to make any finding in this action regarding interstate transport obligations for any state.

2. Stability of ozone levels

As discussed above, the Charlotte NC-SC 1997 8-hour NAAQS Area has maintained air quality below the 1997 8-hour ozone NAAQS over the past twelve design values. Additionally, the design value data shown in Tables 2a and 2b illustrate that ozone levels have been relatively stable over the 2001-2021 timeframe, with an overall downward trend. For example, data in Tables 2a and 2b indicate that the largest year over year change in design values at any one monitor during these seventeen years was 0.008 ppm, which occurred between the 2003 and 2004 design values and between the 2013 and the 2014 design values, representing approximately an 8 percent and 10 percent decrease at monitors 37-159-0022 (Enochville) and 37-119-0041 (Garinger), respectively. Furthermore, the overall trend in design values for the Charlotte NC-SC 1997 8-hour NAAQS Area between the 2003-2021 design values, shows a decrease of 38 percent at the highest monitor, Rockwell CSS monitor 37-159-002. This downward trend in ozone levels, coupled with the relatively small year over year variation in ozone design values, makes it reasonable to conclude that the Charlotte NC-SC 1997 8-hour NAAQS Area will not exceed the 1997 8-hour ozone NAAQS during the second 10-year maintenance period.

C. Monitoring Network and Verification of Continued Attainment

EPA periodically reviews the ozone monitoring networks operated and maintained by the

[20] On April 30, 2021, EPA published the final Revised Cross-State Air Pollution Rule (CSAPR) Update (RCU) using updated modeling that focused on analytic years 2023 and 2028 and an "interpolation" analysis of these modeling results to generate air quality and contribution values for the 2021 analytic year. *See* 86 FR 23054. https://www.govinfo.gov/content/pkg/FR-2021-04-30/pdf/2021-05705.pdf. This modeling included projected ozone design values for ozone monitors in the Charlotte SC-NC maintenance area. See the spreadsheet titled "Data File with Ozone Design Values and Ozone Contributions (xlsx)" at https://www.epa.gov/csapr/revised-cross-state-air-pollution-rule-update.

states in accordance with 40 CFR part 58. The network plans are submitted annually to EPA, and network assessments are submitted every five years. NCDAQ operates a network plan with multiple monitors within the boundary of the Charlotte NC-SC 1997 8-hour NAAQS Area.[21] The annual network plan developed by NCDAQ follows a public notification and review process. EPA has reviewed and approved the North Carolina 2021 Ambient Air Monitoring Network Plan ("2021 Annual Network Plan").[22] Mecklenburg County Air Quality and NCDAQ also submitted 2020 Ambient Air Monitoring Network Assessments as required by 40 CFR 58.10(d).

To verify the attainment status of the Metrolina Area over the maintenance period, the maintenance plan should contain provisions for continued operation of an appropriate, EPA-approved monitoring network in accordance with 40 CFR part 58. As noted above, North Carolina's 2020 Annual Network Plan, which covers the monitors within the Charlotte NC-SC 1997 8-hour NAAQS Area, has been approved by EPA in accordance with 40 part 58. In the LMP, North Carolina commits to continue to monitoring ozone in the Metrolina Area. North Carolina states that any monitoring changes will only be made if they are consistent with 40 CFR part 58 and that any monitor shutdowns or relocations will only be made with EPA's approval.

D. Contingency Plan

Section 175A(d) of the Act requires that a maintenance plan include contingency provisions. The purpose of such contingency provisions is to prevent future violations of the NAAQS or to promptly remedy any NAAQS violations that might occur during the maintenance period. The state should identify specific triggers which will be used to determine when the contingency measures need to be implemented.

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[21] South Carolina maintains one monitor in York County. Although that monitor is near the maintenance boundary, it is not used to determine compliance of the Charlotte NC-SC 1997 8-hour NAAQS Area with the 1997 8-hour ozone NAAQS because it is not located within the maintenance area. The Catawba Longhouse monitor referenced in Tables 2a and 2b is a monitor maintained by the Catawba Indian Nation (CIN), and the CIN land was included in the Charlotte NC-SC 1997 8-hour NAAQS Area boundary.

[22] *See* October 27, 2021, letter and approval from Caroline Freeman, Director, Air and Radiation Division, EPA Region 4 to Mike Abraczinskas, Director, Division of Air Quality, North Carolina Department of Environmental Quality, available in the docket for this proposed action.

The LMP has three triggers. The primary trigger will be a violating design value of the 1997 8-hour ozone NAAQS within the Charlotte NC-SC 1997 8-hour NAAQS Area. The trigger date will be 60 days from the date on which an ozone monitor in the Area records a fourth highest value that, when averaged with the two previous ozone seasons' fourth highest values, results in a three year average equal to or greater than 85 ppb. If this trigger or the secondary trigger is activated, the LMP requires North Carolina to conduct analyses to determine the emission control measures that will be necessary for attaining or maintaining the 1997 8-hour ozone NAAQS. The plan outlines the steps that North Carolina must conduct to determine control measures, including verification and analysis of data related to the exceedance, and possible causes. North Carolina will adopt and implement as expeditiously as practicable, but no later than 24 months after the trigger event, at least one control measure that is determined to be most appropriate for reducing NOx emissions.[23]

The secondary trigger will apply if the state finds monitored ozone levels indicating that an actual ozone NAAQS violation may be imminent, i.e., when there are two consecutive ozone seasons in which the fourth highest values are 85 ppb or greater at a single monitor within the maintenance area. The tertiary trigger will be a first alert as to a potential future violation and will be activated when a monitor in the Area has a fourth highest value of 85 ppb or greater, starting the first year after the maintenance plan has been approved. Like the primary trigger, the trigger date for the secondary and tertiary triggers will be 60 days from the date on which an ozone monitor in the Area records the pertinent fourth highest value. Tertiary trigger activation will result in the analyses described in the LMP to understand why a fourth high exceedance has occurred and in the development of an outreach plan identifying any additional voluntary measures that can be implemented.

[23] *See* Contingency Plan section of the LMP for further information regarding the contingency plan, including measures that North Carolina will consider for adoption if the trigger is activated. The LMP is available in the docket for this proposed action.

EPA proposes to find that the contingency provisions in North Carolina's second maintenance plan for the 1997 8-hour Ozone NAAQS meet the requirements of the CAA section 175A(d).

E. Conclusion

EPA proposes to find that the Metrolina Area LMP for the 1997 8-hour ozone NAAQS includes an approvable update of various elements of the initial EPA-approved maintenance plan for the 1997 8-hour ozone NAAQS. EPA also proposes to find that the Metrolina Area qualifies for the LMP option and adequately demonstrates maintenance of the 1997 8-hour ozone NAAQS through the documentation of monitoring data showing maximum 1997 8-hour ozone levels well below the NAAQS and historically stable design values. EPA believes the Metrolina Area LMP, which retains existing control measures in the SIP, is sufficient to provide for maintenance of the 1997 8-hour ozone NAAQS in the Metrolina Area over the second maintenance period (i.e., through 2034) and thereby satisfies the requirements for such a plan under CAA section 175A(b). EPA is therefore proposing to approve North Carolina's December 9, 2021, submission of the Metrolina Area LMP as a revision to the North Carolina SIP.

V. Transportation Conformity and General Conformity

Transportation conformity is required by section 176(c) of the CAA. Conformity to a SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS. *See* CAA 176(c)(1)(A) and (B). EPA's transportation conformity rule at 40 CFR part 93 subpart A requires that transportation plans, programs, and projects conform to SIPs, and that it establishes the criteria and procedures for determining whether they conform. The conformity rule generally requires a demonstration that emissions from the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP) are consistent with the motor vehicle emissions budget (MVEB)

contained in the control strategy SIP revision or maintenance plan. *See* 40 CFR 93.101, 93.118, and 93.124. A MVEB is defined as "the portion of the total allowable emissions defined in the submitted or approved control strategy implementation plan revision or maintenance plan for a certain date for the purpose of meeting reasonable further progress milestones or demonstrating attainment or maintenance of the NAAQS, for any criteria pollutant or its precursors, allocated to highway and transit vehicle use and emissions." *See* 40 CFR 93.101.

Under the conformity rule, LMP areas may demonstrate conformity without a regional emissions analysis. *See* 40 CFR 93.109(e). On August 13, 2013, EPA made a finding that the MVEBs for the first 10 years of the 1997 8-hour ozone maintenance plan for the North Carolina portion of the Charlotte NC-SC 1997 8-hour NAAQS Area were adequate for transportation conformity purposes. In a Federal Register notice dated August 13, 2013, EPA notified the public of that finding. *See* 78 FR 49265. This adequacy determination became effective on August 28, 2013.

After approval of this LMP or an adequacy finding for this LMP, there is no requirement to meet the "budget test" for motor vehicle emissions pursuant to the transportation conformity rule for the Metrolina Area. All actions that would require a transportation conformity determination for the Metrolina Area under EPA's transportation conformity rule provisions are considered to have already satisfied the regional emissions analysis and "budget test" requirements in 40 CFR 93.118 as a result of EPA's adequacy finding for this LMP. *See* 69 FR 40004 (July 1, 2004).

However, because LMP areas are still maintenance areas, certain aspects of transportation conformity determinations still will be required for transportation plans, programs, and projects. Specifically, for such determinations, RTPs, TIPs, and transportation projects still will have to demonstrate that they are fiscally constrained (40 CFR 93.108) and meet the criteria for consultation (40 CFR 93.105) and Transportation Control Measure implementation in the conformity rule provisions (40 CFR 93.113) as well as meet the hot-spot requirements for

projects (40 CFR 93.116).[24] Additionally, conformity determinations for RTPs and TIPs must be determined no less frequently than every four years, and conformity of plan and TIP amendments and transportation projects is demonstrated in accordance with the timing requirements specified in 40 CFR 93.104. In addition, in order for projects to be approved they must come from a currently conforming RTP and TIP. *See* 40 CFR 93.114 and 40 CFR 93.115. The Charlotte NC-SC 2008 NAAQS Area must continue to meet all applicable requirements of the general conformity regulations.

VI. Proposed Action

Under sections 110(k) and 175A of the CAA and for the reasons set forth above, EPA is proposing to approve the Metrolina Area LMP for the 1997 8-hour ozone NAAQS, submitted by NCDAQ on December 9, 2021, as a revision to the North Carolina SIP. EPA is proposing to approve the Metrolina Area LMP because it includes an acceptable update of various elements of the 1997 8-hour ozone NAAQS Maintenance Plan approved by EPA for the first 10-year period (including emissions inventory, assurance of adequate monitoring and verification of continued attainment, and contingency provisions), and retains the relevant provisions of the SIP.

EPA also finds that the Metrolina Area qualifies for the LMP option and that, therefore, the Metrolina Area's LMP adequately demonstrates maintenance of the 1997 8-hour ozone NAAQS through documentation of monitoring data showing maximum 1997 8-hour ozone levels well below the NAAQS and continuation of existing control measures. EPA believes that the Metrolina Area's 1997 8-Hour Ozone LMP is sufficient to provide for maintenance of the 1997 8-hour ozone NAAQS in the Metrolina Area over the second 10-year maintenance period, through 2034, and thereby satisfies the requirements for such a plan under CAA section 175A(b).

VII. Statutory and Executive Order Reviews

[24] A conformity determination that meets other applicable criteria in Table 1 of paragraph (b) of this section (93.109(e)) is still required, including the hot-spot requirements for projects in CO, PM_{10}, and fine particulate matter ($PM_{2.5}$) areas.

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. *See* 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. This action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq*.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and

- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area.where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental Protection, Air Pollution Control, Incorporation by reference, Intergovernmental Relations, Nitrogen Oxides, Ozone, Reporting and Recordkeeping Requirements, Volatile Organic Compounds.

Authority: 42 U.S.C. 7401 et seq.

Dated: November 10, 2022.

Daniel Blackman,
Regional Administrator,
Region 4.

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